Primary Author Name	Classification	Faculty Advisor Dept	Faculty Advisor College	Faculty_Advisor	Project Title
Madison Jones	Undergraduate Student	Agriculture	Agriculture and Human Ecology	Dr. Nattrass	Potential For Use of Wood Chips as Bioreactors to Reduce the Amount of Nitrogen From Agriculture Run-off.
Kenny Pierce	Graduate Student	Agriculture	Agriculture and Human Ecology	Dr. Michael Nattrass	Rapid-Screening Bioassay Assessing Potential Allelopathic Influence on Spinach by Aqueous Extract from Fresh, Whole-Plant Sorghum-Sudangrass Tissue
Alyson Parks	Undergraduate Student	Human Ecology	Agriculture and Human Ecology	Hannah Upole	Consumers' Attitudes Towards Sustainable Dyeing Methods
Kathryn Dye	Undergraduate Student	Human Ecology	Agriculture and Human Ecology	Dr. Rufaro Chitiyo	Emotional Regulation and Coping Mechanisms for Family Science Professionals
Hailey Smith	Undergraduate Student	Human Ecology	Agriculture and Human Ecology	Hannah Upole	Using Textiles to Improve Home Efficiency: Are Consumers Willing to Invest in the Future?
Krissie Miranda	Graduate Student	Human Ecology	Agriculture and Human Ecology	Dr. Hutson	To Examine the Effects of Food Insecurity On Mental Health Among College Students
Natalie Perkins	Undergraduate Student	Biology	Arts and Sciences	Richard Pirkle	Utilizing Leukocyte Profiles to Compare Stress Levels in Brooding Canada Geese (Branta canadensis)
Holly Gothard	Graduate Student	Biology	Arts and Sciences	Dr. Carla Hurt	Applied Functional Genomics for the Conservation of the Imperiled Hardin Crayfish (Faxonius wrighti)
Shawna Radford Coulter	Undergraduate Student	Chemistry	Arts and Sciences	Dr. Amanda Carroll	Impacts of NQSA-TSC ligand loading on metal ion removal from aqueous solutions by chelating resins
Sydney Decatur	Undergraduate Student	Chemistry	Arts and Sciences	Dr. Andrew Callender	Element Composition of Dust Samples Using X-Ray Fluorescence Spectroscopy
Alice LeTran	Undergraduate Student	Chemistry	Arts and Sciences	Dr. Chad Rezsnyak	Effects of COVID-19 on general chemistry exam scores
Samiat Olayiwola	Graduate Student	Chemistry	Arts and Sciences	Dr. Jesse Carrick	Synthesis of Carboxylated Symmetric Bis-(1,2,4)-triazinyl pyridine (BTP) Complexants for Minor Actinide Separations.
Gabi Burke	Undergraduate Student	Earth Sciences	Arts and Sciences	Dr. Joseph Asante	Identifying Sources of Water Contributing to Discharge of Boils Spring, Gainesboro TN
Clarice Kiser	Undergraduate Student	Earth Sciences	Arts and Sciences	Dr. Michael Harrison	Strike-slip faulting associated with the Cumberland Plateau overthrust, Spencer, Tennessee

Hailey Reagan	Undergraduate Student	English	Arts and Sciences	Kristen Deiter	Romeoâ€™s Love: Romantic or Delusion? A Psychoanalytic Approach to Romeo and Juliet
Nicki Parish	Graduate Student	English	Arts and Sciences	Dr. Kris Pickering	â€œWeâ€™re Just Doing Dragâ€: How Social Media Affects User Perceptions of Drag Queens
Cheyenne Douthitt	Undergraduate Student	History	Arts and Sciences	Edward Driggers	Medicine in the Confederacy: Vaccination and Racism during the American Civil War
Angus Bryant	Graduate Student	Mathematics	Arts and Sciences	Michael Allen	An extension of informatic polymatroids
Luke Parsons	Undergraduate Student	Physics	Arts and Sciences	Dr. Mary Kidd	In the study of rare event physics, such as neutrinoless double beta decay, it is important to understand the potential background events. Neutron-induced events can take place even deep underground. Experiments that study the neutrinoless double beta decay of 136Xe use material enriched in 136Xe, but they still contain a significant fraction of 134Xe. In this study, we investigate the 134Xe to 135Xe neutron capture interaction by looking for gamma rays emitted from de-excitation from long-lived excited states of 135Xe and the subsequent decay to 135Cs. The xenon gas used was irradiated in the neutron beam at Triangle Universities Nuclear Laboratory, and the decays were counted in the low-background counting facility located in the Duke Physics building. We will report our preliminary results of the neutron capture cross section for incident neutron energies of 4.2 and 5.5 MeV.
Marlee Miller	Undergraduate Student	Sociology and Political Science	Arts and Sciences	Nicole Cook	Exploring Power-based Violence Experiences of women experiencing Homelessness: Impacts on Pathways to Prison and Policy Implications
Clay Melton	Undergraduate Student	Accounting	Business	Dr. Robert Wilbanks	Corporate Social Responsibility Reporting and Target
Jessica Mitchell	Graduate Student	Counseling and Psychology	Education	Dr. Katherine Hermann-Turner	Nature's Therapeutic Impact on College Students with ADHD
Carey Wilson	Graduate Student	Curriculum and Instruction	Education	Dr. Holly Anthony	Got STEM Education? A Content Analysis of Four STEM Education Journals

Spencer Stiles	Undergraduate Student	Exercise Science	Education	Ajit Korgaokar	Creatine Monohydrate Supplementation
Silas Boyd	Undergraduate Student	Chemical Engineering	Engineering	Pedro Arce	Advanced Oxidative Degradation of Acetaminophen by Titanium Dioxide-Based Photocatalytic Methods: Role of Intermediaries
Shafieh Karami	Graduate Student	Chemical Engineering	Engineering	Dr. Pedro Arce	Evaluation of the Microplastic Particles Occurrence in a Main Municipal Wastewater-Case Study: Treatment Plant located in West of Iran
Katherine Phillips	Undergraduate Student	Computer Science	Engineering	Doug Talbert	Using Group-Specific Models to Improve Trust in Machine Learning Models for Trauma Triage
Ocheme Anthony Ekle	Graduate Student	Computer Science	Engineering	Dr. Denis Ulybyshev	Machine Learning-based Categorization of Cybersecurity Vulnerabilities.
Matthew Brotherton	Graduate Student	Computer Science	Engineering	William Eberle	An Analysis of Image-based Malware Classification Using Convolutional Neural Networks
Daniel Simpson	Graduate Student	Computer Science	Engineering	Maanak Gupta	Explaining Dynamic-Feature Malware Detection Models with SHAP
Bethanie Williams	Graduate Student	Computer Science	Engineering	Muhammad Ismail	Malware Detection With Machine Learning
Austin Jerrolds	Undergraduate Student	Electrical and Computer Engineering	Engineering	Dr. J.W Bruce	A Viable Machine Learning Dataset for Academic Dishonesty Detection in Computer-based Testing
Emmanuel Aboah Boateng	Graduate Student	Electrical and Computer Engineering	Engineering	J.W. Bruce	Explainable ICS Anomaly Detection based on COPOD Algorithm
Joshua Lolonyo Korku Avornyo	Graduate Student	Electrical and Computer Engineering	Engineering	Prof. Joseph Ojo	A SIMPLIFIED APPROACH TO THE ANALYSIS OF HIGH ORDER BIDIRECTIONAL INDUCTIVE POWER TRANSFER SYSTEMS
Taiye Owu	Graduate Student	Electrical and Computer Engineering	Engineering	Dr. Ojo Olorunfemi	Minimization of Stray Field and Coupling Coefficient for a Double-D pad Wireless Power Transfer Using an Analytical Approach.
Mohammad Alshaikh Ali	Graduate Student	Manufacturing and Engineering Technology	Engineering	Ismail Fidan	Using Regression Machine Learning to Predict Mechanical Properties of Additively Manufactured Specimens with Imbalanced Data
Miguel Fuentes Garcia	Undergraduate Student	Mechanical Engineering	Engineering	Steven Anton, PhD	Efforts to Standardize Uniaxial Tensile Testing of Well-Preserved Human Tissue
Jacob Hott	Graduate Student	Mechanical Engineering	Engineering	Dr. Steven Anton	An Investigation of a Laboratory Scale Surrogate Model for the Design of Smart Buildings

Jacob Starker	Undergraduate Student	Music	Fine Arts	Dr. Jeff Womack	Contrabasoon Restoration